

IN THE CLAIMS:

On page 6, line 1, cancel "CLAIMS" and substitute –WE CLAIM AS OUR INVENTION:-- therefor.

Claims 1-4 have been cancelled.

5 1-4. (Cancelled)

Add the following new claims.

5. (New) A biventricular cardiac stimulation device comprising:
a pulse generator adapted to interact respectively with ventricles of a
heart to deliver stimulation pulses to each of the ventricles;
10 a control unit connected to the pulse generator to operate the pulse
generator to emit a stimulation pulse to a first-stimulated
ventricle, followed by a VV time delay, followed by a stimulation
pulse to a second-stimulated ventricle;
an evoked response detector adapted to interact with the ventricles
15 and having independent, first and second ventricular sensing
channels to detect ventricular evoked response in the respective
ventricles, said evoked response detector searching for an
evoked response following delivery of a stimulation pulse to said
first-stimulated ventricle in an evoked response detection time
20 window;
said control unit setting said VV time delay to be shorter than said
evoked response detection time window; and
said evoked response detector closing said evoked response detecting
time window, or discarding detections therein, in response to
25 emission of the stimulation pulse to the second-stimulated
ventricle during said evoked response detection time window
following said first-stimulated ventricle.

6. (New) A biventricular cardiac stimulation device as claimed in claim
5, comprising an inhibiting unit that inhibits stimulation of said second-

stimulated ventricle in response to detection, by said evoked response detector, of a sensed intrinsic cardiac event in said second-stimulated ventricle.

7. (New) A biventricular cardiac stimulation device as claimed in claim
5 5 wherein said control unit sets said VV time delay to be less than 40 msec.

8. (New) A biventricular cardiac stimulation device as claimed in claim
7 wherein said control unit sets said VV time delay in a range between 10 and
30 msec.

9. (New) A biventricular cardiac stimulation device as claimed in claim
10 5 wherein said evoked response detector sets said evoked response
detection time window for said first-stimulated ventricle to be in a range
between 40 and 100 msec.

10. (New) A method for biventricular cardiac stimulation comprising
the steps of:

15 a pulse generator adapted to interact respectively with ventricles of a
heart to deliver stimulation pulses to each of the ventricles;
a control unit connected to the pulse generator to operate the pulse
generator to emit a stimulation pulse to a first-stimulated
ventricle, followed by a VV time delay, followed by a stimulation
20 pulse to a second-stimulated ventricle;
an evoked response detector adapted to interact with the ventricles
and having independent, first and second ventricular sensing
channels to detect ventricular evoked response in the respective
ventricles, said evoked response detector searching for an
25 evoked response following delivery of a stimulation pulse to said
first-stimulated ventricle in an evoked response detection time
window;
said control unit setting said VV time delay to be shorter than said
evoked response detection time window; and
30 said evoked response detector closing said evoked response detecting
time window, or discarding detections therein, in response to

emission of the stimulation pulse to the second-stimulated ventricle during said evoked response detection time window following said first-stimulated ventricle.

5 11. (New) A method as claimed in claim 5, comprising an inhibiting unit that inhibits stimulation of said second-stimulated ventricle in response to detection, by said evoked response detector, of a sensed intrinsic cardiac event in said second-stimulated ventricle.

12. (New) A method as claimed in claim 5 wherein said control unit sets said VV time delay to be less than 40 msec.

10 13. (New) A method as claimed in claim 7 wherein said control unit sets said VV time delay in a range between 10 and 30 msec.

14. (New) A method as claimed in claim 5 wherein said evoked response detector sets said evoked response detection time window for said first-stimulated ventricle to be in a range between 40 and 100 msec.